Environmental Regulations Guide Section 4 Pollution Prevention

4. 0 Pollution Prevention

The Pollution Prevention Act (PPA) focuses on source reduction, i.e. on reducing the amount of pollution through cost-effective changes in production, operation, and raw materials use. Pollution prevention is an approach for protecting the environment that recognizes that the best way to clean the environment is to prevent pollution in the first place. Although the Pollution Prevention Act (PPA) of 1990 offers little in the way of definitive regulatory programs, it does provide EPA the authority to go forward with a national pollution prevention strategy as a way to refocus current environmental rules away from traditional "end-of-pipe" requirements and toward reducing the source of pollution.

One of three primary focuses for City of Scottsdale operations (along with regulatory compliance and continuous improvement) is pollution prevention. Controlling procurement and finding less toxic alternatives are two primary strategies to accomplish pollution prevention goals.

This section also includes stormwater pollution regulations--both NPDES and stormwater generally, and industrial pretreatment regulations. The Federal Water Pollution Control Act (FWPCA) established the regulatory program to "reach and maintain the chemical, physical, and biological integrity of the nation's waters." The FWPCA's key provisions are the National Pollutant Discharge Elimination System (NPDES); Section 208 Areawide Waste Treatment Planning Program; and requirements for dredge and fill permits.

4.1 Pollution Prevention Act of 1990:

40 CFR Parts 50ff.(air); part 112 (water-oil); parts 260ff. (RCRA); 33 USC chapters 26&40; 42 USC chapters 55,85,133; ARS 49-961-973

Purpose

To refocus current environmental rules away from traditional "end-of-pipe" requirements and toward reducing sources of pollution. Practices include recycling, source reduction and sustainable agriculture.

Helpful Details

Companies/Municipalities are required to have pollution prevention programs for waste classified as hazardous. EPA has several pollution prevention/waste minimization reporting requirements.

Large quantity generators (more than 1000kg) of hazardous waste must certify on their biennial report to EPA that they have a program in place at their facility to reduce the amount and toxicity of hazardous waste generated, treated, stored or disposed. The generator's certification of waste minimization must compare their most recent waste minimization efforts to those of previous years.

When large quantity generators send hazardous waste off-site for treatment, storage or disposal, they must certify on the manifest that have a waste minimization program in place to reduce the quantity and toxicity of hazardous waste.

As of July 1, 1992, those subject to the annual Toxic Release Inventory (TRI) reporting requirements (Form R reporting) under EPA's community right-to-know rules, are responsible for reporting their waste minimization efforts to EPA. TRI reports must include information about how each reportable chemical was reduced, the reduction amount, and how much chemical waste was sent off-site for recycling.

Facilities subject to EPA stormwater discharge permit requirements are required to develop and implement stormwater pollution prevention plans (SWPPP), based on best management practices.

The 1990 amendments to the Federal Clean Air Act call for a reduction and eventual ban on the production and use of chlorofluorocarbons (CFCs).

Agency Contacts

City of Scottsdale	United States Environmental Protection Agency,
Environmental Planning and Design Office	Region IX
7447 E. Indian School Rd., Suite 300	75 Hawthorne Street
Scottsdale, AZ 85251	San Francisco, CA 94105
(480) 312-7990	(415) 744-2125
U.S. Environmental Protection Agency Office Pollution Prevention and Toxics 401 M Street SW Washington, DC 20460 (202) 554-1404	Arizona Department of Environmental Quality Waste Programs Division Pollution Prevention Unit 3033 N. Central Avenue Phoenix, AZ 85012 (602) 207-2338

Actions Required

REMINDERS: This Guide focuses on permits as the starting point for regulatory compliance with each program. If your department's facilities and/or activities require a permit under these programs, you may also need to comply with related requirements to:

- 1) pay fees;
- 2) write and submit plans and applications:
- 3) file reports;
- 4) make notifications;
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

The primary city requirements under the Pollution Prevention Act are: submittal of annual reports, the development of Pollution Prevention plans, ensuring that SWPPs are being filed with the EPA and the proper handling of CFCs in city operations.

Fees

None, fees for RCRA permits and reports fund this program.

Best Number to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

4.2 National Pollutant Discharge Elimination System (NPDES) Permit: 40 CFR part 122

Purpose

To protect surface waters by regulating discharges to the storm water system through a permit program.

Helpful Details

Arizona is not authorized by EPA to administer the federal NPDES permit program. Waste water and stormwater discharges in the state are regulated by EPA's Region IX office. However, all permits must be in compliance with Arizona's water quality standards. Arizona has adopted by reference the federal effluent limitations. EPA's Region IX office administers the federal NPDES permit program in Arizona, including effluent limitations in facility permits and the enforcement of these requirements.

ADEQ processes the applications and drafts permits for EPA. Point sources include outfalls from a pipe such as discharges from an industrial facility to a dry wash or stream.

There are a number of types of permits required under the NPDES programs – individual, general and new source permits. The city has two types of permits. One is a general permit for urban storm water run-off throughout the city. The second, is a NPDES permit for specific city facilities. Businesses can file a Notice of Intent (NOI) to be included under the NPDES general permit for their specific industry.

Agency Contacts

United States Environmental Protection Agency Region IX 75 Hawthorne Street San Francisco, CA 94105 (415) 744-2125

Arizona Department of Environmental Quality Plan Review and Permits 3033 N. Central Ave. Phoenix, AZ 85012 (602) 207-4687

Actions Required

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- 3) file reports;
- 4) make notifications;
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- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

There is an extensive application process for NPDES permits. Notifications must be made to EPA and ADEQ prior to discharges. Once the permits are obtained, the facility is responsible for complying with all requirements of the permit. Written plans and annual reports are elements of the permit requirements.

Fees

None at this time.

Best Number to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

4.2.1 NPDES General Permit -- Industrial Activities: 40 CFR part 122

Purpose

To improve the quality of the water that is discharged to the surface waters of the United States by establishing a permit system to eliminate the discharge of pollutants into storm water associated with commercial and industrial activities. To require a permit for stormwater runoff directly related to manufacturing, processing, or raw-material storage. To ensure the use of best management practices (BMPs) for storm water pollution control for new and existing industrial activities.

Helpful Details

The city has a general permit for all stormwater run-off within the City of Scottsdale. In addition, the City has NPDES permits for 3 facilities – Via Linda Corporation Yard, Scottsdale Airport and the city's water campus.

Agency Contacts

City of Scottsdale Storm Water Notices of Intent Water Resources Department 9388 E San Salvador Scottsdale, AZ 85251 (480) 312-5685 Arizona Department of Environmental Quality Storm Water Coordinator PO Box 600 Phoenix, AZ 8500 (602) 207-4466

United States Environmental Protection Agency Region IX 75 Hawthorne Stree San Francisco, CA 94105 (415) 744-2125

Actions Required

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- 2) write and submit plans and applications;
- 3) file reports;
- 4) make notifications;
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- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

An extensive application process is necessary to obtain the city's general permit for stormwater run-off. The City's permit has now been finalized. The city created a stormwater ordinance with authority to monitor stormwater run-off and require permits of any business or facility that discharges into the city's stormwater system.

EPA makes the final decision on the permit applications. Applications must be submitted to ADEQ 6 months prior to start of discharge.

The city's three facilities that have NPDES permits must comply with the requirements in those permits. The primary requirement is to ensure that polluted storm water does not leave the facility's property and enter the city's stormwater system. These three facilities must maintain their permits, annually report to ADEQ and pay the required fees.

Fees

None at this time.

Best Number to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

4.2.2 NPDES General Permit -- Construction Activities: 40 CFR part 122

Purpose

To improve surface water quality by establishing a permit system to reduce erosion potential, minimize sedimentation and eliminate nonstormwater discharges from construction sites.

Helpful Details

Arizona is one of the 12 states currently not authorized to implement the NPDES permit program and therefore EPA Region IX administers the program. A General Permit developed by EPA for Arizona became effective October 1, 1992. The General Permit for Storm Water Discharges from Construction Sites requires that a Notice of Intent (NOI) be sent to EPA, and copy to both ADEQ and the City of Scottsdale.

Agency Contacts

ADEQ: Storm Water Coordinator P.O. Box 600

Phoenix, AZ 85001-0600

(602) 207-4466

City of Scottsdale **Quality Compliance**

7447 E. Indian School Rd., Suite 125

Scottsdale, AZ 85251 (480) 312-7080

NPDES Permits; Water Mgmt. Division U.S. Environmental Protection Agency

75 Hawthorne Street San Francisco, CA 94105

(415) 744-2125

Actions Required

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- 2) write and submit plans and applications;
- file reports;
- 4) make notifications;
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

All construction activities, which will disturb five or more acres, must apply for coverage under the NPDES General Permit. Note: A project cannot be phased to avoid permit compliance or application for a permit. A Notice of Intent (NOI) form must be completed by the owner/operator and submitted to EPA 48 hours prior to commencing construction. ADEQ and the City of Scottsdale must also receive copies of the completed NOI form. A Storm Water Pollution Prevention Plan (SWPPP) must be prepared (prior to submitting the NOI) and maintained on-site to meet any changes in site activities or conditions. NOI must be posted at site with other permits. The owner/operator must inspect the site monthly and after a rainfall event of 0.5 inch or greater. Records must be maintained for three years after project termination. An NOI must be sent to EPA, ADEQ and the City of Scottsdale by permittee when project is complete or no longer owned by permittee

Fees

None at this time

Best Number to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

4.3 Stormwater Discharge Permits: State water quality requirements:

40 CFR part 129; ARS 49-245; AAC Title 18 chapter 11

Purpose

To prevent any person under the Clean Water Act (CWA) from discharging pollutants into a municipal storm sewer from a point source unless the discharge is authorized by permit issued by EPA or an authorized state agency.

Helpful Details

Arizona does not have NPDES permitting authority. EPA regulates stormwater discharges in Arizona through its general stormwater permit. Arizona also requires that copies of the federal stormwater permit application and termination forms are submitted to ADEQ.

EPA Region 9 administers stormwater discharge permit requirements in Arizona. Arizona has established a state stormwater coordinator to answer questions about the federal stormwater program and act as liaison to regulated dischargers in Arizona.

Agency Contacts

Arizona Department of Environmental Quality Surface Water Quality Section Engineering Review and Permits Unit 3033 N. Central Avenue Phoenix, AZ 85012 (602) 207-2338 United States Environmental Protection Agency Region IX 75 Hawthorne Stree San Francisco, CA 94105 (415) 744-2125

Actions Required

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- 3) file reports;
- 4) make notifications:
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

For coverage under EPA's general permit for Arizona, both industrial and construction site stormwater dischargers are required to file federal notice of intent (NOI) forms to EPA at:

- Stormwater Notices of Intent, P.O. Box 1215, Newington, VA 22122.
- The NOI is also submitted to ADEQ at: Stormwater Coordinator, ADEQ, P.O. Box 600, Phoenix, AZ 85001-0600.

The NOI has to include the registration number of any dry well or injection well to which stormwater is discharged.

For discharges to municipal storm sewer systems in Phoenix, Tempe, Mesa, Tucson or Pima County, the NOI is submitted to the municipal operator for the particular system.

For construction projects operating under approved state or local sediment and erosion plans, or stormwater management plans, the NOI is also filed with the local agency that approved such plans. EPA Region iX will also process applications for individual stormwater permits or multi-sector general permits.

Fees

There are currently no fees required for NPDES stormwater discharge permits.

Best Number to Call

City of Scottsdale Environmental Hotline: (480) 312-7899

4.4 Pretreatment Standards: 40 CFR 401; ARS 49-391; AAC Title 18 chapters 4.5.11

In Arizona, pretreatment standards are the federal pretreatment standards adopted by reference. There is an additional provision that cities, towns, counties and/or sanitary districts can adopt ordinance enforcement authority to administer these federal standards. Federal pretreatment standards apply to discharges of pollutants from any non-domestic source that is introduced into a publicly owned treatment works (POTW). A POTW includes any system used in the storage, treatment, recycling and reclamation of municipal sewage or industrial waste in liquid form. The regulations also apply to POTWs that receive wastewater from industrial sources. The standards do not apply to either the placement of sludge in municipal solid waste landfills, nor the application of sludge that is co-incinerated with large amounts of solid waste.

The objective of pretreatment standards is to ensure that pollutants are not discharged into the sewer system. Those pollutants could potentially either "interfere" with the POTWs functioning, or allow pollutants to "pass through" to the waters of the United States without first receiving appropriated pretreatment.

Scottsdale sewage flows to the Phoenix 92nd Avenue POTW. There are no POTWs in the city of Scottsdale. The Scottsdale Water Resources Department currently inspects and regulates approximately a dozen companies in the City under the Pretreatment Program. The City's authority is via a program regulated by the EPA under a City of Phoenix NPDES permit.

City operations which could be affected by pretreatment program requirements are: graphics, the CAP Plant and the new Water Campus and the Gainey Wastewater Treatment Plant.

Actions Required

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- 2) write and submit plans and applications:
- 3) file reports;
- 4) make notifications;
- 5) conduct testing and monitoring;
- 6) obtain facility and individual certifications and licenses;
- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

4.4.1 Scottsdale Pretreatment Program: SRC 49-91-210

Purpose

To regulate the discharge of toxic materials to the city's sewer system in order to protect the sewer system and sewage treatment plant from damage. To reduce the discharge of toxic materials from the sewage treatment plant.

Helpful Details

This regulation was created by EPA and is administered by the City of Scottsdale's Water Resources Department. City Project Review staff monitor pretreatment requirements for new construction and remodeling.

Agency Contacts

City of Scottsdale Water Resources Department 9388 E. San Salvador Scottsdale, AZ 85281 (480) 312-5685

Actions Required

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- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

Any user that discharges to the city's sewer system must abide by the discharge limits set forth in the city ordinance. Users discharging any material that exceeds these limits must stop the discharge or install a pre treatment system that will reduce discharges to below the limits. New users must be in compliance from the first day. Existing users will be allowed a period of time to come into compliance. Users must also sample discharges.

Fees

A permit fee of \$80 is required. Failure to comply with these regulations can result in fines up to \$10,000 per day per violation.

Best Number to Call

City of Scottsdale Water Resources Department: (480) 312-5685

4.4.2 State Pretreatment: 33 USC chapter 26; 40 CFR parts 400-499; ARS 49-391; AAC Title 18, chapters 9 & 11

Purpose

To impose upon industrial dishargers the method in which they must treat their wastewater before it is discharged into a publicly owned treatment works (POTW).

Helpful Details

Arizona's water quality standards have adopted the federal pretreatment standards by reference. Pretreatment is the method by which industrial dischargers must treat wastewater before it is discharged into a publicly owned treatment works (POTW). A POTW includes any system used in the storage, treatment, recycling and reclamation of municipal sewage or industrial waste in liquid form. It includes pipes, sewers and conveyances if they are used to convey wastewater to a POTW treatment plant. Pretreatment standards are imposed under a permit or order issued by the POTW. Although the POTW administers and enforces the pretreatment program, EPA and the state retain enforcement authority.

Agency Contacts

U.S. Environmental Protection Agency (EPA) Office of Solid Waste 401 M Street SW Washington, DC 20460 (202) 554-1404	Arizona Department of Environmental Quality Remedial Project Section 3033 N. Central Avenue Phoenix, AZ 85012 (602) 207-2338
United States Environmental Protection Agency Region IX 75 Hawthorne Stree San Francisco, CA 94105 (415) 744-2125	

Actions Required

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- 7) train staff; and various other requirements.

Also, remember that multiple permits are often required under each program and that most permits must be renewed annually or periodically.

The pretreatment program involves three methods that control contaminants from industrial users to POTWs:

- National general and specific discharge prohibitions
- National categorical standards
- Local limits established by POTWs.

Prohibited discharges apply to all sources. The categorical prohibitions are additional standards that apply to particular industries.

EPA has compiled a list of substances that are specifically prohibited from being introduced into POTWs. Prohibited discharges are applicable to all industrial dischargers. Prohibited discharges into a POTW include:

- Pollutants that create a fire or explosion hazard
- Pollutants that would cause corrosive structural damage to the POTW
- Solid or viscous pollutants that would obstruct the flow of the POTW and cause an interference
- Petroleum oil, or products of mineral oil origin in amounts that will cause interference
- Pollutants which result in the presence of toxic gases, vapors or fumes within the POTW in a
 quantity that may cause acute worker health and safety problems
- Any truck or hauled pollutants, except at discharge points designated by the POTW
- Heat that would inhibit biological activity in the POTW, causing an interference
- Any pollutant released at a flow rate or concentration that would cause an interference. The federal rules specify that dilution is not acceptable form of pretreatment, unless expressly authorized by an applicable pretreatment standard.

Fees

None

Best Numbers to Call

U.S. Environmental Protection Agency (EPA): (202) 554-140 Arizona Department of Environmental Quality: (602) 207-2338